HG.1

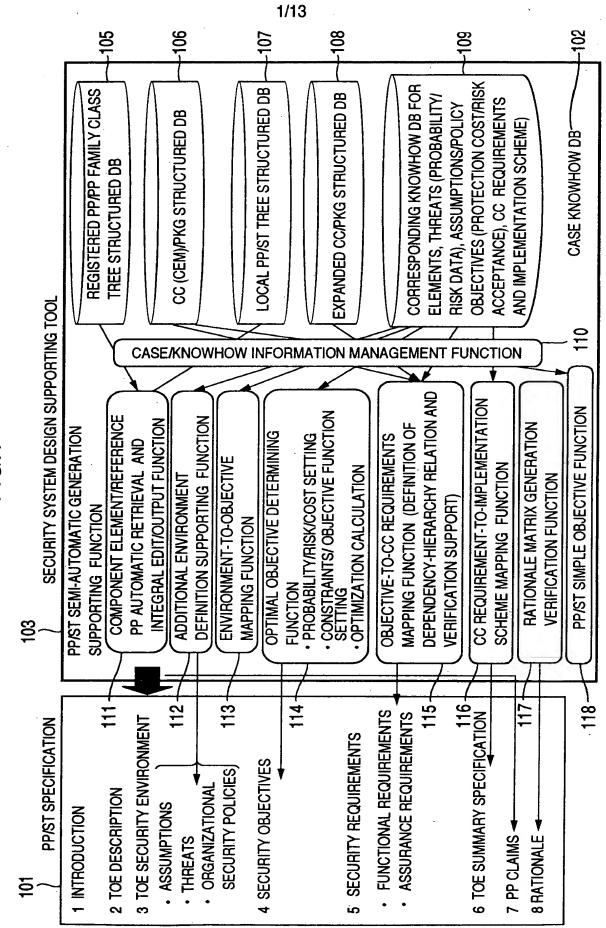




FIG.2

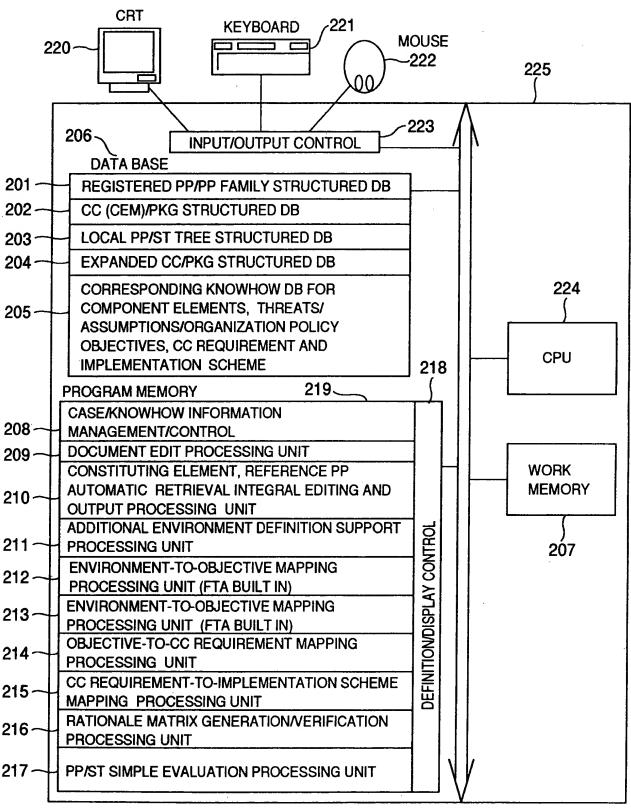




FIG.3

START

301

SELECT AS A COMPONENT ELEMENT THE REFERENCE REGISTERED AND THE LOCAL REGISTERED PP/ST PART ICONS DISPLAYED IN TREE AS A REFERENCE IN PP/ST TEMPLATE SELECT DIALOG ON DESIGN SUPPORTING TOOL INITIAL SCREEN, AND GENERATE TOE CONFIGURATION DIAGRAM.

RETRIEVE PP/STS OF SELECTED CONSTITUTING ELEMENT FROM DATA-BASE BY DEPRESSING PP/ST TEMPLATE DIALOG SETTING BUTTON, INTEGRALLY EDIT DEFINITION INFORMATION OF PP/ST UNDER EACH CHAPTER AND OUTPUT AND DISPLAY ON DOCUMENT EDIT SCREEN.

302

INTERACTIVELY ADD/CORRECT THE DEFINITION CONTENTS UNDER CHAPTERS 1 TO 3 FOR OUTPUT PT/ST DRAFT BY THE DOCUMENT EDIT FUNCTION, SELECT ADDITIONAL ENVIRONMENT DEFINITION SUPPORT OF TOOL MENU FOR ADDITIONAL CONSTITUTING ELEMENT, RETRIEVE CORRESPONDING CASE PARTS OF CONSTITUTING ELEMENTS OF CORRESPONDING KNOWHOW DB INCLUDING THREATS, ASSUMPTIONS AND ORGANIZATIONAL POLICIES BY DEPRESSING ADDITIONAL CONSTITUTING ELEMENT SETTING BUTTON DISPLAYED AS REFERENCE, AND ADDITIONALLY DEFINE THE DEFINITION CONTENTS OF SECURITY ENVIRONMENT UNDER CHAPTER 3

-303

SELECT ENVIRONMENT-TO-OBJECTIVE MAPPING OF TOOL MENU, MAP THE THREATS/ASSUMPTIONS/ORGANIZATIONAL POLICIES CONSTITUTING THE CONTENTS OF DEFINITION UNDER CHAPTER 3 TO SECURITY OBJECTIVES BY RETRIEVING CORRESPONDING KNOWHOW DB, AND ADDITIONALLY DEFINE DIFFERENCE WITH THE OBJECTIVE DEFINED UNDER CHAPTER 4

304

SELECT DATA SETTING FOR DETERMINING OPTIMAL OBJECTIVE OF TOOL MENU, CHECK OCCURRENCE PROBABILITY OF THREATS AND AFFECTED LOSS AMOUNT UNDER CHAPTER 3 AND PROTECTION COST VALUE OF SECURITY OBJECTIVE UNDER CHAPTER 4 DISPLAYED AS A DIALOG BY RETRIEVING CORRESPONDING KNOWHOW DB, AND ADDITIONALLY SET NEW THREATS/OBJECTIVES.

305



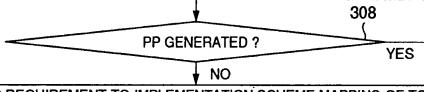


SELECT OBJECTIVE OPTIMIZATION CALCULATION FOR DETERMINATION OF OPTIMAL OBJECTIVE OF TOOL MENU, SET CONSTRAINTS AND OBJECTIVE FUNCTION DISPLAYED IN DIALOG, EXECUTE CALCULATION BY DEPRESSING EXECUTION BUTTON, AND AUTOMATICALLY CORRECT DEFINITION CONTENTS OF THREATS UNDER CHAPTER 3 AND OBJECTIVES UNDER CHAPTER 4 CORRESPONDING TO COMBINATION OF SECURITY OBJECTIVE PROVIDING OPTIMAL SOLUTION

306

SELECT OBJECTIVE-TO-CC REQUIREMENT MAPPING AND EAL LEVEL OF TOOL MENU, RETRIEVE CC/PKG STRUCTURED DB, EXPANDED CC/PKG STRUCTURED DB AND CORRESPONDING KNOWHOW DB, SPECIFY CC REQUIREMENTS CORRESPONDING TO OBJECTIVE DEFINED UNDER CHAPTER 4, AND AUTOMATICALLY CORRECT THE CONTENTS OF DEFINITION OF SECURITY REQUIREMENTS UNDER CHAPTER 5

-307



SELECT CC REQUIREMENT-TO-IMPLEMENTATION SCHEME MAPPING OF TOOL MENU, RETRIEVE CORRESPONDING KNOWHOW DB, SPECIFY IMPLEMENTATION SCHEME CORRESPONDING TO CC REQUIREMENTS DEFINED UNDER CHAPTER 5, AND SET DEFINITION CONTENTS OF SYSTEM SUMMARY SPECIFICATION UNDER CHAPTER 6

-309

SELECT RATIONALE MATRIX GENERATION/VERIFICATION OF TOOL MENU,
AUTOMATICALLY GENERATE CORRESPONDING MATRIX TABLE FROM
CORRESPONDENCE BETWEEN ENVIRONMENT, OBJECTIVES, CC REQUIREMENTS
AND IMPLEMENTATION SCHEME UNDER CHAPTERS 3 TO 6 (OR TO CHAPTER 5
FOR PP GENERATION), AND GIVE MESSAGE IF VERIFICATION SHOWS THE
PRESENCE OF INFORMATION LACKING CORRESPONDENCE

-310

SELECT PP/ST SIMPLE EVALUATION OF TOOL MENU, RETRIEVE CC (CEM)/PKG STRUCTURED DB, DISPLAY PP/ST EVALUATION CHECK LIST FOR CEM IN DIALOG, AND CHECK INTERACTIVELY

·311

SELECT STORAGE WITH NAME IN FILE MENU, SET NAME, AND REGISTER GENERATED PP/ST IN LOCAL PP/ST STRUCTURED DB

312





5/13

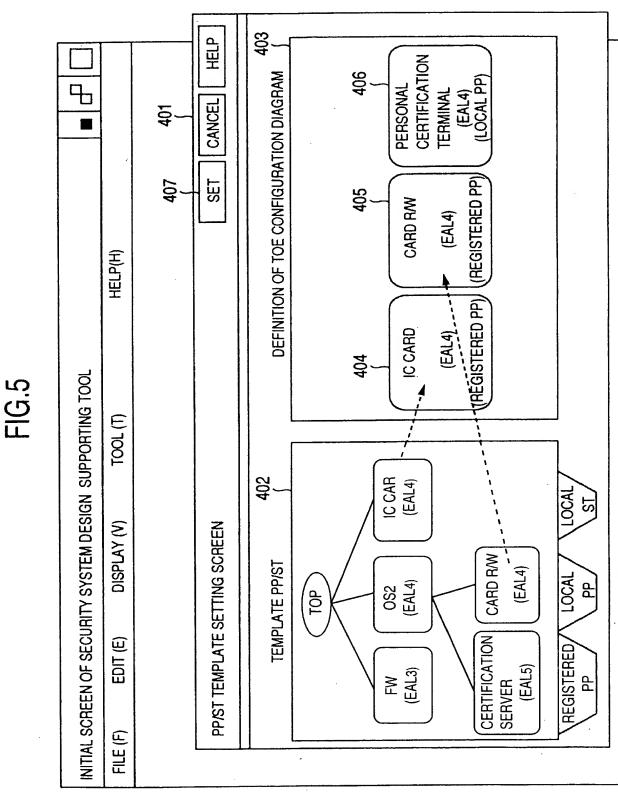


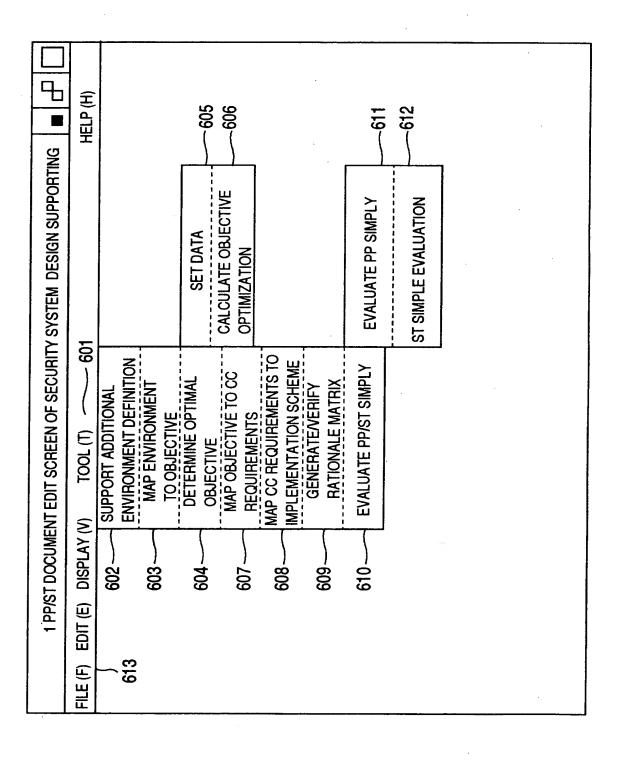


FIG.6

4		
501		
PP/ST DOCUMENT EDIT SCREEN OF SECURITY SYSTEM DESIGN SUPPORTING TOOL	HELP (H)	
	T00L (T)	
	DISPLAY (V)	NS 503 VIRONMENT VIRONMENT VIRON SED 504
MENT EDIT SCF	EDIT (E)	CHAPTER 1 INTRODUCTION ICC-PP: INTRODUCTION TERMINAL-PP: INTRODUCTION CHAPTER 2 TOE OUTLINE ICC-PP: TOE OUTLINE TERMINAL-PP: TOE OUTLINE CHAPTER 3 SECURITY ENVIRONMENT 3.1 ASSUMPTIONS ICC-PP: ASSUMPTIONS TERMINAL-PP: ASSUMPTIONS TERMINAL-PP: ASSUMPTIONS TERMINAL-PP: ASSUMPTIONS TERMINAL-PP: ASSUMPTIONS TERMINAL-PP: ASSUMPTIONS TERMINAL-PP: ASSUMPTIONS GC-PP IDENTIFICATION CHAPTER 7 PP CLAIMS USED ICC-PP IDENTIFICATION CHAPTER 8 RATIONALE
PP/ST DOCU	FILE (F)	CHAPTER 1 INTRO ICC-PP: INTRODUC RAW-PP: INTRODUC TERMINAL-PP: INTRODUC TERMINAL-PP: INTRODUC CHAPTER 2 TOE OUTLI TERMINAL-PP: TOE CHAPTER 3 SECUF 3.1 ASSUMPTIONS ICC-PP: ASSUMPTI TERMINAL-PP: ASSUMPTI







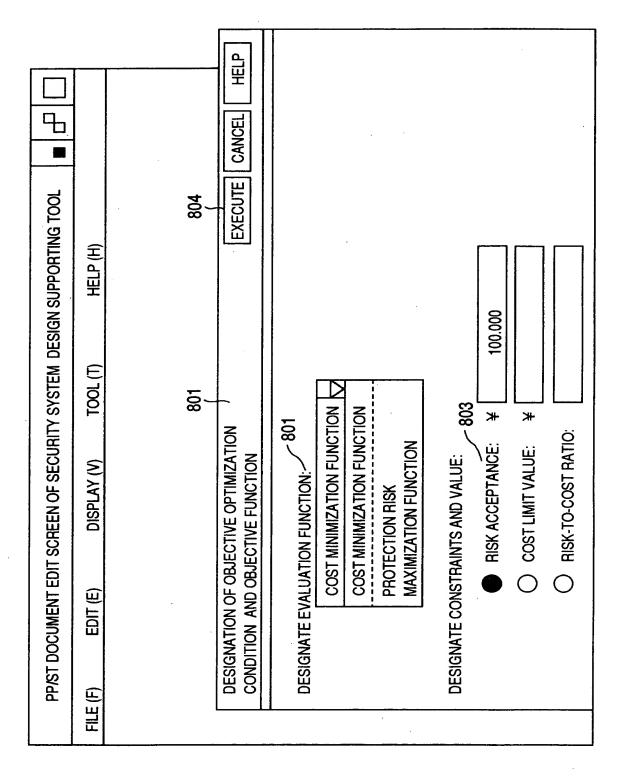
OIPE 40
MAY 1 0 2006
THADEMAN THADEMAN

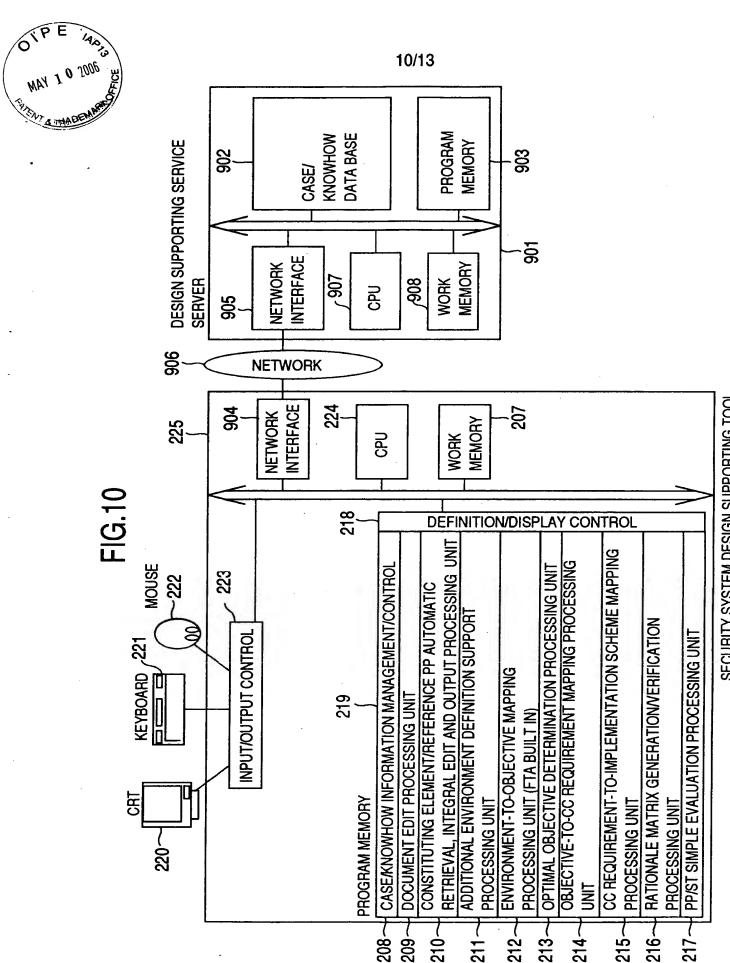
FIG.8

							703		······							
505	ENVIRONMENT/OBJECTIVE CORRESPONDENCE TABLE	OBJECTIVES	OBJECTIVES O-AXX, O-AYY, O-AZZZ		O-PXX,O-PYY		(O-TXX, O-TYY), (O-TZZ)		PROTECTION COST DATA TABLE	PROTECTION COST (YEN)	10,000		CC REQUIREMENTS/IMPLEMENTATION SCHEME 706 CORRESPONDENCE TABLE	IMPLEMENTATION SCHEME	Хдш	
		ENVIRONMENTS	A-XXX	•••	P-XXX	•••	T-XXX	••••	705 PROTECT	COUNTERMEASURES (OBJECTIVES)	O-TXX			CC FUNCTIONAL REQUIREMENTS	FAU_GEN.1	
	NDENCE TABLE	IS THREATS ORGANIZATIONAL POLICIES	T-XXX P-XXX						TA TABLE	Y OF AFFECTED LOSS CE AMOUNT (YEN)	1000.000		IEQUIREMENT NCE TABLE	CC FUNCTIONAL REQUIREMENTS	FAU_GEN.1,FAU_STG.1	
	COMPONENT ELEMENT/ ENVIRONMENT CORRESPO	ELEMENTS ASSUMPTIONS THREATS	X A-XXX						THREATS DATA TABLE	PROBABILITY OF OCCURRENCE	γ 0.004	•••	OBJECTIVE/CC REQUIREMICORRESPONDENCE TABLE	OBJECTIVES CC FUI	O-TXX	
	701	ELEMEI	CompX						704	THREATS	T-XXX		706	OBJE(6	

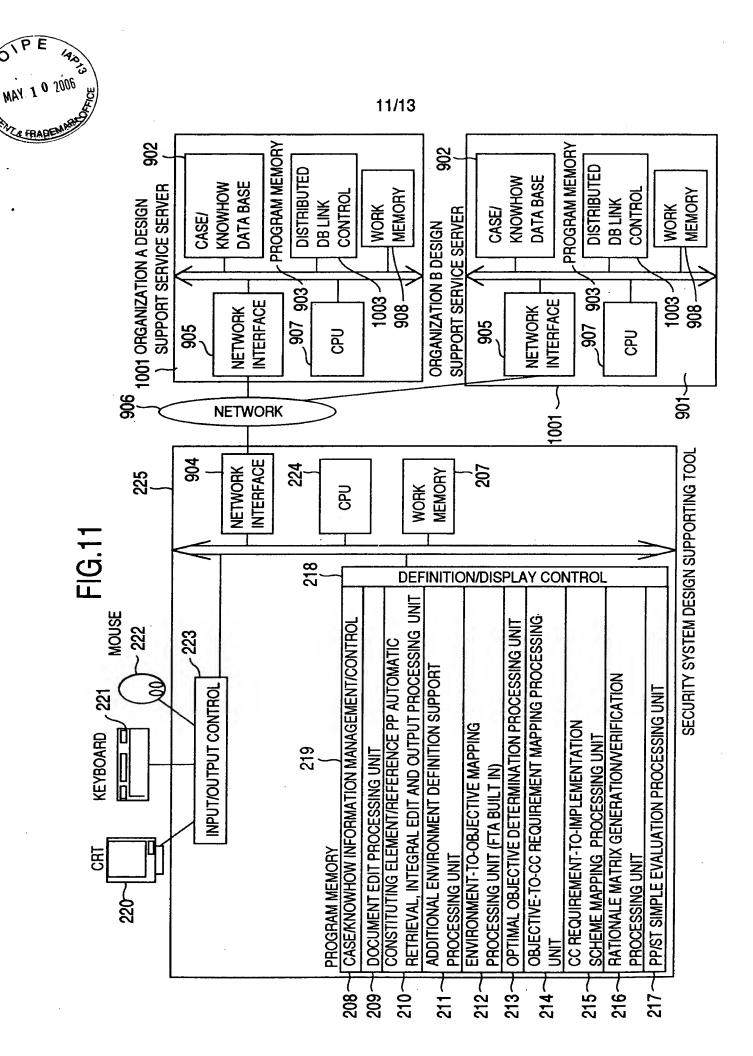


FIG.9

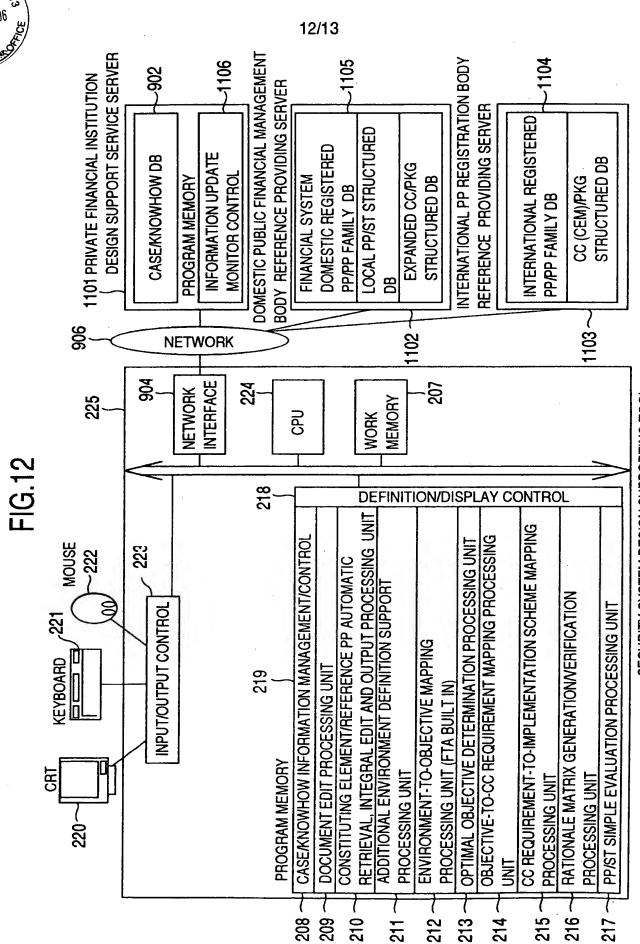




SECURITY SYSTEM DESIGN SUPPORTING TOOL

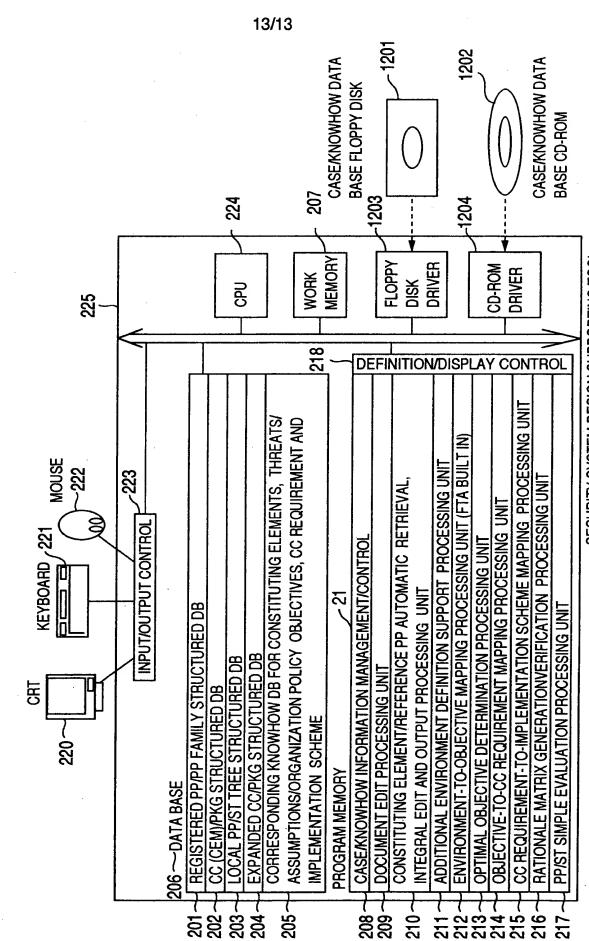






SECURITY SYSTEM DESIGN SUPPORTING TOOL

FIG. 13



SECURITY SYSTEM DESIGN SUPPORTING TOOL